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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/551,760	04/18/2000	Richard J. Proctor	P/61741	2246

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EXAMINER
LEE, TIMOTHY L

ART UNIT	PAPER NUMBER
2697	7

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/551,760	Applicant(s) PROCTOR, RICHARD J.
	Examiner Timothy Lee	Art Unit 2697

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 35-71 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 35-38,41-46,50-55,58-63,and 67-71 is/are rejected.

7)☒ Claim(s) 39,40,47-49,56,57 and 64-66 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 18 April 2000 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. Figures 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 35-38,41-46,50-55,58-63,and 67-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westburg et al. (US 5,946,309).

5. Regarding claims 35, 52, and 71, Westburg et al. discloses a system that can generate more than one data stream, multiplex them together over a transmission line, and then be demultiplexed at a receiving station. If ATM is to be used for transporting data of different applications, then an ATM adaptation layer (AAL) must be used. The AAL reformats the data so the data is compatible with the ATM protocol. The ATM layer then transmits the ATM cells

containing the reformatted data to a receiving station. Two of the most commonly known AALs are designated AAL1 and AAL5. Another AAL layer, AALm, is used to transport small data packets known as microcells—AALm can be considered the same as AAL2. For the purposes of this rejection, ATM cells that contain AAL1 and AAL5 data will be considered "data traffic comprising data in ATM form" while ATM cells that contain AAL2 data will be considered "data traffic comprising data in AAL2 form". See col. 1, lines 1-56. Fig. 3 shows how an AAL mux works to send data over the transmission channel. The system includes a receiving station (a higher layer device), which contains the layers shown in Fig. 2 in order to operate, and a transmitting station (a common device). See col. 3, line 57-col. 4, line 14. Control data and communications data can be sent over the same line, but they can also be sent over different channels, as shown by the dashed line 345 (a bus including lines for carrying data and control signals). At the AAL demux, the control logic extracts the control data and directs the communication data stored in the various ATM cells to the appropriate AAL layers (e.g., AAL1, AAL5, AALm). In this way, the device is able to discriminate between the different forms of data traffic (the devices including discrimination means for discriminating between the two forms of data traffic). Westburg et al. does not expressly disclosing having a plurality of common devices and a plurality of higher level devices in the system. However, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include more than one transmitting station and more than receiving station in the system setup so that there could be a plurality of both kinds of devices. One of ordinary skill in the art would have been motivated to do this because having a plurality of transmitters and receivers would be desirable in a system where there are multiple users and destinations.

6. Regarding claims 36 and 53, Fig. 15 shows ATM cells that contain microcells. The AAL 1405 would reflect the address of the AAL layer associated with the data stored in the ATM cell sequence (data in the AAL2 form includes a minicell associated with a means of identification of at least one of a source and a destination of the mini-cell). See col. 7, lines 27-37.

7. Regarding claims 37 and 54, Westburg et al. discloses that all ATM cells contain a standard header, where the header may be used to identify the source and the destination of the communication data contained in the payload of the corresponding ATM cell. See col. 4, lines 57-67.

8. Regarding claims 38 and 55, Westburg et al. discloses that the ATM header includes a Virtual Path Identifier Code and a Virtual Channel Identifier code. These codes indicate the connection associated with the data stored in the ATM cell payload—since the AAL2 data is associated with ATM cell headers, it also has the VPI and VCI information attached to it. See col. 4, lines 27-45.

9. Regarding claims 41 and 58, Figs. 1 and 2 show that the layers, which are associated with the common device and the higher layers devices, include a physical layer as well as ATM and AALm layers.

10. Regarding claims 42 and 59, as mentioned previously, the AAL demux extracts information from the control signals to determine how to direct the data to the correct layer.

11. Regarding claim 43 and 60, Westburg et al. discloses that the control data can be inserted into the start pointer of a microcell (control signal is a start of the cell signal). See claim 6.

12. Regarding claims 45 and 62, Westburg et al. discloses that control data can be sent in the form of resource management ATM cells, which are separate from communications data cells. These cells act as a separate "signal". See col. 5, lines 5-20.

13. Regarding claims 46 and 63, Westburg et al. discloses that control data can be inserted into the headers of the ATM cells, and as mentioned previously, the control data is used to direct data to the correct layer when it reaches the demux.

14. Regarding claims 50, 51, 67, and 68, Westburg et al. does not expressly disclose lines for carrying address signals for selecting a device from the plurality of devices, but it would have been obvious to have an extra signal in Westburg et al. to determine to where the transmitter should be transmitting data to. One would have been motivated to do this because if there were multiple devices present, then it would be necessary to have some selecting function in order for the transmitter to send data to the correct destination.

15. Regarding claim 69, Westburg et al. discloses that the ATM header includes a Virtual Path Identifier Code and a Virtual Channel Identifier code. These codes indicate the connection associated with the data stored in the ATM cell payload—since the AAL2 data is associated with ATM cell headers, it also has the VPI and VCI information attached to it. See col. 4, lines 27-45.

Allowable Subject Matter

16. Claims 39, 40, 47-49, 56, 57, and 64-66 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ostman et al. (US 6,483,838), Merritt (US 6,393,025), and Caves (US 6,266,343) disclose systems that use AAL2 and ATM cells.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy Lee whose telephone number is (703)305-7349. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703)305-4744. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

TLL
July 22, 2003

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600